

**ANTIBACTERIAL ACTIVITY OF LACTIC ACID  
BACTERIA ISOLATED FROM RIPE FRUITS**

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## ABSTRACT

### ANTIBACTERIAL ACTIVITY OF LACTIC ACID BACTERIA ISOLATED FROM RIPE FRUITS

Recently, there is an increase in lactose intolerance which inhibits people who is lactose intolerance to consume any dairy product. Genera lactic acid bacteria which are often found in dairy products are proven to give beneficial effect to gastrointestinal tract and prevent pathogen invasion. Therefore, ripe fruits are chosen as an alternative besides dairy product to get the beneficial lactic acid bacteria since they have suitable conditions for the growth of lactic acid bacteria. This study aim to isolate the lactic acid bacteria from ripe fruits of banana, grapes and mango and evaluate their antibacterial activity against food borne pathogen of *E.coli*, *Salmonella* and *Shigella* using disk diffusion method. The ripe fruits were able to be isolated on de Man, Rogosa and Sharpe (MRS) agar. The colonies isolated were subjected to morphology and biochemical test which revealed to be *Lactobacillus* sp. for mango and grapes and *Lactococcus* sp. for banana. The antibacterial activity results showed that isolates *Lactobacillus* sp. from grapes gives higher inhibition zone compared to *Lactococcus* sp. from banana. Therefore, from the results it can conclude that lactic acid bacteria isolated from ripe fruits showed potential antibacterial activity against food borne pathogen.